The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 20

### UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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Ex parte JAMES W. THACKERAY,
 and GEORGE W. ORSULA

Appeal No. 1999-0771 Application No. 08/640,144

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ON BRIEF

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Before HANLON, PAK, and NAGUMO, <u>Administrative Patent Judges</u>.

HANLON, <u>Administrative Patent Judge</u>.

# DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the final rejection of claims 38 through 45, all of the claims pending in the application. The claims on appeal are directed to an antihalation coating. Claim 38 is illustrative and reads as follows:

38. An antihalation coating comprising a resin binder and a crosslinker compound capable of causing crosslinking reaction

of the resin binder, said resin binder conforming to the formula:

$$\begin{array}{c}
x \\
C = 0 \\
C = 0
\end{array}$$

$$\begin{array}{c}
C = 0 \\
OR
\end{array}$$

where x varies between 0.1 and 1.0, R is hydrogen or alkyl and R' is a member selected from the group consisting of hydrogen, alkyl, halo and alkoxy.

The references relied upon by the examiner are:

Green et al.	(Green ('938))	4,299,938	Nov.	10,	1981
Green et al.	(Green ('052))	4,413,052	Nov.	1,	1983
Craun		4,487,889	Dec.	11,	1984
Kiss et al.	(Kiss)	4,764,561		Aug.	. 16,
				1988	3

The following rejections are at issue in this appeal:

(1) Claims 38, 39 and 45 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Green ('052).

- (2) Claims 40 through 42 are rejected under 35 U.S.C. § 103 as being unpatentable over Green ('052) in view of Green ('938).
- (3) Claims 43 and 44 are rejected under 35 U.S.C. § 103 as being unpatentable over Green ('052) in view of Kiss.
- (4) Claim 45 is rejected under 35 U.S.C. § 103 as being unpatentable over Green ('052) in view of Craun.

## Discussion

#### A. Claim 38

The claims on appeal are directed to an antihalation coating comprising a resin binder and a crosslinker compound. The resin binder contains anthracene units and carboxy and/or alkyl ester units pendant from a polymer backbone. See claim 38 ("where x varies between 0.1 and 1.0").

Claim 38 is rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Green ('052). See Verdegaal Bros., Inc. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.").

Green ('052) discloses a compound (A) useful in producing images. Compound (A) contains at least one (meth)acryloyl group and at least one anthryl group in the same molecule. When exposed to actinic radiation, compound (A) is photopolymerized through the (meth)acryloyl group(s) and upon further exposure to actinic radiation is photocrosslinked through the anthryl group(s). See col. 4, line 63-col. 5, line 35.

The examiner maintains that polyanthryl acrylate is formed when compound (A) is polymerized and on that basis concludes that the polymer or resin binder formed in the process disclosed in Green ('052) is identical to the claimed resin binder. See Answer, p. 7.

Appellants argue that the claimed resin binder is a copolymer composed of 9-anthrylmethyl acrylate units as well as carboxy and/or alkyl ester units. See Brief, p. 7. However, the examiner argues that appellants' claims are not limited to copolymers. The examiner explains that when x equals 1 in claim 38 a homopolymer results, namely, the polyanthryl acrylate taught in Green ('052). See Answer, p. 8.

Claim 38 recites a value of x "between 0.1 and 1.0." By definition, the term "between" excludes the end points of the

claimed range, i.e., 0.1 and 1.0. Therefore, claim 38 does not include resin binders composed solely of anthracene units (x = 1) as maintained by the examiner. Rather, claim 38 requires a resin binder composed of anthracene units as well as carboxy and/or alkyl

ester units in an amount equal to (1-x), wherein x is a value  $\underline{between}$  0.1 and 1.0.1

What is clearly missing from the rejection based on 35 U.S.C. § 102(b) is any explanation of why Green ('052) "clearly anticipates" the claimed antihalation composition comprising a resin binder composed of anthracene units and carboxy and/or alkyl ester units. See In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984) (the examiner bears the initial burden of presenting a prima facie case of patentability). For

<sup>&</sup>lt;sup>1</sup>In the event of further prosecution, the examiner should determine whether claim 38 is described within the meaning of 35 U.S.C. § 112, first paragraph.

this reason, the rejection of claim 38 under 35 U.S.C. § 102(b) as being clearly anticipated by Green ('052) is <u>reversed</u>.

### B. Claims 39 through 45

Claims 39 through 45 depend from claim 38. Therefore, for the reasons set forth above reversing the rejection of claim 38, the following rejections are also reversed: (1) the rejection of claims 39 and 45 under 35 U.S.C. § 102(b) as being clearly anticipated by Green ('052), (2) the rejection of claims 40 through 42 under 35 U.S.C. § 103 as being unpatentable over Green ('052) in view of Green ('938), (3) the rejection of claims 43 and 44 under 35 U.S.C. § 103 as being unpatentable over Green ('052) in view of Kiss, and (4) the rejection of claim 45 under 35 U.S.C. § 103 as being unpatentable over Green ('052) in view of Craun. See 37 CFR § 1.75(c) (2001) ("Claims in dependent form shall be construed to include all the limitations of the claim incorporated by reference into the dependent claim.").

#### REVERSED

ADRIENE LEPIANI Administrative		-	)			
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CHUNG K. PAK			)	_	PPE	
Administrative	Patent	Judge	)	AND INTERFERENCE		
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# ALH/lp

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# Letty

JUDGE HANLON

APPEAL NO. 1999-0771

APPLICATION NO. 08/640,144

APJ HANLON

APJ PAK

APJ NAGUMO

DECISION: REVERSED

PREPARED: Nov 13, 2002

AU: 1700 OB/HD

PALM

ACTS 2

DISK (FOIA)

REPORT

BOOK